

January 29, 2002

Mr. Barry J. Alexin
Indiana Flame Service
P.O. Box 540
Portage, Indiana 46368

Re: Significant Source Modification No:
127-14517-00026

Dear Mr. Alexin:

Indiana Flame Service - a contractor of Bethlehem Steel Corporation submitted an application to modify the Bethlehem Steel Burns Harbor plant on June 19, 2001. The Bethlehem Steel Corporation applied for a Part 70 operating permit on December 13, 1996; however, the Part 70 Permit for this source has not yet been issued. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

One (1) enclosed steel scarfing facility, identified as S010-01, having a maximum throughput capacity of 200 tons of steel slabs per hour and consisting of a 1.55 MMBtu/hr natural gas-fired preheater. Emissions for this facility are controlled by one (1) baghouse, identified as EP010-011, which exhausts through stack 010-11.

Insignificant activities including:

- (a) Degreasing operations that do not exceed 145 gallons per 12 month and not subject to 326 IAC 20-6.
- (b) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, and welding equipment.
- (c) Steel plate storage and handling activities emitting less than five (5) tons per year of particulate matter and less than five (5) tons per year of particulate matter with aerodynamic diameter of less than ten (10) micrometers.
- (d) Storage vessels containing lubricating oils, hydraulic oils, machining oils, and machining fluids.

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Amanda Baynham, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7910 to speak directly to Ms. Baynham. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
ERG/AB

cc: File - Porter County
U.S. EPA, Region V
Porter County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Dave Samplas
Compliance Data Section - Karen Nowak
Administrative and Development - Sara Cloe
Technical Support and Modeling - Michele Boner
Office of Air Enforcement - Brian Eaton
Part 70 Reviewer - Melissa Groch
Part 70 File - 127-7656-00026

PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY

**Indiana Flame Service -
A Contractor of Bethlehem Steel Corporation
U.S. Highway 12
Burns Harbor, Indiana 46304**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 127-14517-00098	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: January 29, 2002

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D.2.2 Volatile Organic Compounds (VOC)

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Certification

SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a steel manufacturing plant.

Responsible Official:	Mr. Barry J. Alexin, Manager of Engineering
Source Address:	U.S. Highway 12, Burns Harbor, Indiana 46304
Mailing Address:	P.O. Box 540, Portage, Indiana 46368
SIC Code:	3312
County Location:	Porter
Source Location Status:	Nonattainment for ozone Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major under PSD and Emission Offset Rules; 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

One (1) enclosed steel scarfing facility, identified as S010-01, having a maximum throughput capacity of 200 tons of steel slabs per hour and consisting of a 1.55 MMBtu/hr natural gas-fired preheater. Emissions for this facility are controlled by one (1) baghouse, identified as EP010-011, which exhausts through stack 010-11.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Degreasing operations that do not exceed 145 gallons per 12 month and not subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]
- (b) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, and welding equipment. [326 IAC 6-3-2]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

A.5 Part 70 Source Definition 326 IAC 2-7-1(22)]

This steel manufacturing plant consists of a source with an on-site contractor:

- (a) Bethlehem Steel Corporation owns and operates the steel plant, located on U.S. Highway 12, Burns Harbor, Indiana; and
- (b) Indiana Flame Service (a contractor to Bethlehem Steel Corporation) owns and operates an enclosed steel scarfing facility, located on U.S. Highway 12, Burns Harbor, Indiana.

IDEM has determined that Bethlehem Steel Corporation and the Indiana Flame Service facility located at the Burns Harbor plant are under the common control of Bethlehem Steel Corporation. These two plants are considered one source because the scarfing facility is located on Bethlehem Steel Corporations property and will be used primarily to scarf steel slabs for Bethlehem Steel Corporation.

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
 - (1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
 - (2) If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.

- (3) If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will issued after EPA review.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to

the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.10 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.11 Compliance Response Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such

additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and the Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM, OAQ

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

Northwest Regional Office

Telephone Number: 1-888-209-8892, or

Telephone Number: 219-881-6712

Facsimile Number: 219-881-6745

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management

Compliance Branch, Office of Air Quality

100 North Senate Avenue, P. O. Box 6015

Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

**C.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.14 Emission Statement [326 IAC 2-7-5(3)(c)(iii)][326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:
- Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015
- The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

One (1) enclosed steel scarfing facility, identified as S010-01, having a maximum throughput capacity of 200 tons of steel slabs per hour and consisting of a 1.55 MMBtu/hr natural gas-fired preheater. Emissions for this facility are controlled by one (1) baghouse, identified as EP010-011, which exhausts through stack 010-11.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the steel scarfing facility shall not exceed 58.5 pounds per hour when operating at a process weight rate of 200 tons per hour. The pounds per hour limitation was calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.2 Prevention of Significant Deterioration [326 IAC 2-7-5(13)]

The outlet grain loading for the baghouse (identified as EP 010-011) shall be limited to 0.003 gr/ascf, when operating at a maximum exhaust gas flow rate of 120,000 acfm. This limit is required to limit the PM emissions after controls to less than twenty-five (25) tons per twelve (12) consecutive month period and to limit the PM₁₀ emissions after controls to less than fifteen (15) tons per twelve (12) consecutive month period.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.4 Particulate Matter (PM)

In order to comply with Conditions D.1.1 and D.1.2, the baghouse (identified as EP010-011) used for PM control shall be in operation and control emissions from the steel scarfing facility at all times that the steel scarfing facility is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 Visible Emissions Notations

- (a) Visible emission notations of the steel scarfing facility stack exhaust (identified as stack 010-11) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the scarfing facility at least once per shift when the scarfing facility is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the scarfing facility when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.1.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Condition D.1.5, the Permittee shall maintain records of visible emission notations of the scarfing stack exhaust once per shift.
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain the following:
 - (1) Once per shift records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle operation.
- (c) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Insignificant activities:

- (a) Degreasing operations that do not exceed 145 gallons per 12 month and not subject to 326 IAC 20-6.
- (b) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, and welding equipment.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.2.2 Volatile Organic Compounds (VOC)

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser without remote solvent reservoirs constructed after July 1, 1990, shall ensure that the following requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at

thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.2.3 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the brazing equipment, cutting torches, soldering equipment, and welding equipment shall not exceed allowable PM emission rate based on the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Indian Flame Service - A Contractor of Bethlehem Steel Corporation
Source Address: U.S. Highway 12, Burns Harbor, Indiana 46304
Mailing Address: P.O. Box 540, Portage, Indiana 46368
Source Modification No.: 127-14517-00098

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Significant Source Modification

Source Background and Description

Source Name:	Indiana Flame Service - A contractor to Bethlehem Steel
Source Location:	U.S. Highway 12, Burns Harbor, Indiana 46368
County:	Porter
SIC Code:	3312
Operation Permit No.:	127-14517-00098
Permit Reviewer:	ERG/AB

On December 13, 2001, the Office of Air Quality (OAQ) had a notice published in the Vidette Times in Munster and the Chesterton Tribune in Chesterton, Indiana, stating that Indiana Flame Service had applied for a Part 70 Significant Source Modification to construct and operate a scarfing facility with control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On January 14, 2002, Bethlehem Steel Corporation, submitted comments on the proposed Significant Source Modification. The comments and OAQ's responses are summarized below:

Comment 1: Condition C.11 - Compliance Monitoring Plan - Failure to Take Response Steps. Bethlehem Steel does not object to this condition being included in this permit, but reserves the right to contest IDEM's jurisdiction to include this provision in any future permit, including any permit issued to the entire Bethlehem Steel source.

Response to Comment 1: Bethlehem Steel Corporation's desire to reserve the right to contest IDEM's jurisdiction to include this provision in any future permit has been noted. No additional changes have been made to this condition.

Comment 2: Condition D.1.3 - Preventive Maintenance Plan. Bethlehem Steel Reserves its right in any future permit to object to any condition that requires a preventive maintenance plan for both the facility and its control device. The condition should only apply to the control device, and the phrase "this facility and" should be deleted.

Response to Comment 2: Pursuant to 326 IAC 2-7-4(c)(9) (Permit Application), confirmation that the source maintains on-site a preventive maintenance plan as described in 326 IAC 1-6-3, must be included in the permit application. Pursuant to 326 IAC 2-7-5(13) (Permit Content), a provision that requires the source to do all of the following must be included in each Part 70 permit:

- 1) Maintain on-site the preventive maintenance plan as required under 326 IAC 2-7-4(c)(9);
- 2) Implement the preventive maintenance plan; and,
- 3) Forward to the department upon request the preventive maintenance plan.

The requirements in 326 IAC 1-6-1 and 326 IAC 1-6-3 specify that the requirement to maintain a Preventive Maintenance Plan is applicable to any facility that is required to obtain a permit under 326 IAC 2-1-2 (Registration) and 326 IAC 2-1-4 (Operating Permits). Any preventive maintenance that could effect emissions from the facility in question should be listed in the Preventive Maintenance Plan, including preventive maintenance of the facility itself. No changes have been made to Condition D.1.3.

Comment 3: Condition D.1.4 - Particulate Matter. This condition, which requires operation of the scarfer baghouse, should be modified to indicate that the operation of the baghouse is not required when allowed by permit or rule. Accordingly, Condition D.1.4 should be modified to state:

“Except as allowed by this permit or applicable regulations, in order to comply with Conditions D.1.1 and D.1.2, the baghouse (identified as EP010-011) used for PM control shall be in operation and control emissions from the steel scarfing facility at all times that the steel scarfing facility is in operation.”

Response to Comment 3: The issue raised in this comment is already specifically addressed in Condition C.6 and need not be added to condition D.1.4. No changes have been made to the permit.

Comment 4: Condition D.2.3 - Particulate Matter (PM). Bethlehem Steel reserves its right to object in any future permit to the specific delineation of insignificant activities that are covered only by the process weight rule because that is not a specific regulation but is instead a regulation of general applicability.

Response to Comment 4: Bethlehem Steel Corporation’s desire to reserve the right to contest the applicability of the process weight rule to insignificant activities in future permits has been noted. No changes have been made to the permit.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified to reflect these changes.

1. Indiana Flame Service is a subsidiary of Edward C. Levy Company. Edward C. Levy operates other emission units at Bethlehem Steel and has previously been assigned the source identification number 127-00026. The proposed scarfing facility will be constructed and operated by Indiana Flame Service, who will apply for a separate Part 70 operating permit. Hence, the scarfing facility should have been assigned a new source identification number prior to public notice. IDEM, OAQ has subsequently assigned the identification number 127-00098 to the scarfing operation. The permit has been revised to reflect the correct permit number of 127-14517-00098. This change has not been made to the Technical Support Document (TSD), because OAQ prefers that no changes be made to the TSD after public notice and that all changes be documented in this addendum to the TSD.
 2. The IDEM, OAQ has restructured C.11 to clarify the contents and implementation of the compliance response plan. The name of the condition has changed to better reflect the contents of the condition. The language regarding the OAQ’s discretion to excuse failure to perform monitoring under certain conditions has been deleted. The OAQ retains this discretion to excuse minor incidents of missing data; however, it is not necessary to state criteria regarding the exercise of that discretion in the permit. In C.11 (c)(2) “administrative amendment” has been revised to “minor permit modification”, because 326 IAC 2-7-11(a)(7) has been repealed. The title Compliance Monitoring Plan has been changed to Compliance Response Plan throughout the permit.
- C.11 **Compliance Monitoring Response Plan - Failure to Take Response Steps** [326 IAC 2-7-5] [326 IAC 2-7-6]
-
- (a) The Permittee is required to **prepare** ~~implement a compliance monitoring plan to~~ ensure that reasonable information is available to evaluate its continuous compliance

~~with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:~~

~~(1) This condition;~~

~~(2) The Compliance Determination Requirements in Section D of this permit;~~

~~(3) The Compliance Monitoring Requirements in Section D of this permit;~~

~~(4) The Record Keeping and Reporting Requirements in Section C (General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and~~

~~(5) A a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, **supplemented from time to time by the Permittee**, and maintained on site, and is comprised of:~~

~~(A)(1) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.~~

~~(B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.~~

~~(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.~~

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition **as follows:** ~~Failure to take reasonable response steps may constitute a violation of the permit.~~

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such

response steps in accordance with this condition.

- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.**
- (4) Failure to take reasonable response steps shall constitute a violation of the permit.**
- ~~Upon investigation of a compliance monitoring excursion, the~~ **The Permittee is excused from taking not required to take any** further response steps for any of the following reasons:

 - ~~(1) A false reading occurs due to the malfunction of the monitoring equipment and This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.~~
 - ~~(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment a minor permit modification to the permit, and such request has not been denied.~~
 - ~~(3) An automatic measurement was taken when the process was not operating.~~
 - ~~(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.~~
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.**
- ~~(d)(e) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. The Permittee shall record all instances when response steps are taken.~~ **The Permittee shall record all instances when response steps are taken.** In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- ~~(e)(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed at all times when the equipment emission unit is operating, except for time necessary to perform quality assurance and maintenance activities. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.~~
- ~~(f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping~~

~~requirements in Section D:~~

4. IDEM, OAQ has revised C.13 Actions Related to Noncompliance Demonstrated by a Stack Test; a certification by the responsible official is required for the notification sent in response to non-compliance with a stack test.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

-
- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do ~~not~~ require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

5. The IDEM, OAQ, has revised certain Parametric Monitoring conditions in the D section of the permit to address concerns regarding the independent enforceability of permit conditions [see 40 CFR 70.6(a)(6)(i)]. The Parametric Monitoring Condition D.1.6 have been revised to establish normal operating conditions for the emission unit or control device and to require implementation of the compliance response plan when monitoring indicates operation is outside the normal range. Language that inferred that operating outside of the normal range could be considered by itself to be a deviation was removed.

D.1.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the scarfing facility, at least once per shift when the scarfing facility is in operation when venting to the atmosphere. ~~Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within~~ **is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test.** ~~The ,the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps. for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. A pressure reading that is outside the above mentioned range is not a deviation from this permit.~~ Failure to take response steps in accordance with Section C - Compliance Monitoring **Response Plan - Failure to Take Response Steps**, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

Indiana Flame Service-A contractor to Bethlehem Steel
Burns Harbor, Indiana
Permit Reviewer: ERG/AB

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127-14517-00098

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification

Source Background and Description

Source Name:	Indiana Flame Service - A contractor of Bethlehem Steel Corporation
Source Location:	U.S. Highway 12, Burns Harbor, Indiana 46304
County:	Porter
SIC Code:	3312
Operation Permit No.:	T 127-7656-00026
Operation Permit Issuance Date:	Not yet issued
Significant Source Modification No.:	127-14517-00026
Permit Reviewer:	ERG/AB

The Office of Air Quality (OAQ) has reviewed a modification application from the Indiana Flame Service (a contractor of Bethlehem Steel Corporation) relating to the construction of the following emission units and pollution control devices:

One (1) enclosed steel scarfing facility, identified as S010-01, having a maximum throughput capacity of 200 tons of steel slabs per hour and consisting of a 1.55 MMBtu/hr natural gas-fired preheater. Emissions for this facility are controlled by one (1) baghouse, identified as EP010-011, which exhausts through stack 010-11.

Insignificant Activities

- (a) Degreasing operations that do not exceed 145 gallons per 12 month and not subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]
- (b) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, and welding equipment. [326 IAC 6-3-2]
- (c) Steel plate storage and handling activities emitting less than five (5) tons per year of particulate matter and less than five (5) tons per year of particulate matter with aerodynamic diameter of less than ten (10) micrometers.
- (d) Storage vessels containing lubricating oils, hydraulic oils, machining oils, and machining fluids.

History

On June 19, 2001, the Indiana Flame Service (a contractor of Bethlehem Steel Corporation) submitted an application to the OAQ requesting to add a steel scarfing facility at the Bethlehem Steel plant in Burns Harbor, Indiana. Bethlehem Steel has submitted an application for a Title V permit, which is currently

being processed by IDEM, OAQ. The Title V application was submitted by Bethlehem Steel Corporation on December 13, 1996.

Source Definition

This steel manufacturing facility consists of a source with an on-site contractor:

- (a) Bethlehem Steel Corporation owns and operates the steel plant, located at U.S. Highway 12, Burns Harbor, Indiana; and
- (b) Indiana Flame Service owns and operates an enclosed steel scarfing facility located at U.S. Highway 12, Burns Harbor, Indiana.

IDEM has determined that Bethlehem Steel Corporation and Indiana Flame Service facility located at the Burns Harbor plant are under the common control of Bethlehem Steel Corporation. These two plants are considered one source due to contractual control. Therefore, the term "source" in the Part 70 documents refers to both Bethlehem Steel Corporation and Indiana Flame Service as one source.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
010-11	Scarfing facility (S010-01)	45	6	120,000	150

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on June 19, 2001.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document (Pages 1 through 3).

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	262.9
PM-10	262.9
SO ₂	0.004
VOC	0.037
CO	0.570
NO _x	0.679

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4), because the potential to emit PM and PM10 for this modification is greater than twenty-five (25) tons per year.

County Attainment Status

The source is located in Porter County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Severe Nonattainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Porter County has been designated as nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Porter County has been classified as attainment or unclassifiable for all PM10, SO₂, CO, and lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	2,586
PM-10	2,586
SO ₂	7,515
VOC	979
CO	241,801

Pollutant	Emissions (tons/year)
NOx	10,372

- (a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the 28 listed source categories.
- (b) These emissions are based upon the Technical Support Document for the construction permit CP-127-4478-00001, issued to Bethlehem Steel Corporation, issued on September 15, 1995. The PSD status of the Indiana Flame Service is based on the PSD status of Bethlehem Steel Corporation because they are considered one source.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)					
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x
Scarfig Facility	13.19	13.19	0.004	0.037	0.570	0.679
PSD/Offset Threshold level	25	15	40	40	100	40

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

This modification to an existing major stationary source is not major because the emissions increase is less than the Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.
- (c) The degreasing operations are not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63, Subpart T-National Emission Standards for Halogenated Solvent Cleaning (326 IAC 14) because the source uses only non-halogenated solvents.

State Rule Applicability - Individual Facilities

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM₁₀. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of the new scarfing facility will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 8-1-6 (New Facilities - General Reduction Requirement)

The new scarfing facility does not have potential VOC emissions equal to or greater than twenty five (25) tons per year, therefore this source is not subject to the provisions of 326 IAC 8-1-6.

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the steel scarfing facility (identified as S010-01) shall be limited to 58.5 pounds per hour based on a maximum process weight rate of 200 tons per hour.

This limit was calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The baghouse (identified as EP010-011) shall be in operation at all times the steel scarfing facility is in operation, in order to comply with this limit.

326 IAC 2-2 (Prevention of Significant Deterioration)

The outlet grain loading for the baghouse (identified as EP010-011) shall be limited to 0.003 yr/ascf, when operating at a maximum exhaust gas flow rate of 120,000 acfm. This limit is required to limit the PM emissions after controls to less than twenty-five (25) tons per twelve (12) consecutive month period and to limit the PM₁₀ emissions after controls to less than fifteen (15) tons per twelve (12) consecutive month period.

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the brazing equipment, cutting torches, soldering equipment, and welding equipment shall not exceed allowable PM emission rate based on the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and}$$

P = process weight rate in tons per hour

326 IAC 8-3-2 (Cold Cleaner Operations)

The degreasing operations are subject to the requirements of 326 IAC 8-3-2 (Cold Cleaner Operations) because they were constructed after January 1, 1980.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

The degreasing operations are subject to the requirements of 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control) because they were constructed after July 1, 1990.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

1. The scarfing facility has applicable compliance monitoring conditions as specified below:
 - (a) Daily visible emissions notations of the scarfing facility shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
 - (b) The Permittee shall record the total static pressure drop across the baghouse controlling the scarfing facility, at least once daily when the scarfing facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 3.0 to 6.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.
 - (c) The Permittee shall perform an inspection each calendar quarter of all bags controlling the scarfing facility when venting to the atmosphere. A baghouse

inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

These monitoring conditions are necessary because the baghouse for the scarfing facility must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 127-14517-00026.

Appendix A: Emissions Calculations
Particulate Matter Emissions from Scarfing Operations

Page 1 of 3 TSD App A

Company Name: Indiana Flame Service (a contractor for Bethlehem Steel)
Address City IN Zip: U.S. Highway 12, Burns Harbor, IN
Part 70 Permit: 127-14517
Plt ID: 127-00026
Reviewer: ERG/AB
Date: 07/17/01

Facility/Operation	Emission Factor (lbs/ton)	Maximum Quantity of Material (tons/hour)	Maximum Uncontrolled PM Emissions (tons/year)	Collection Efficiency of Baghouses (%)	Maximum Controlled PM Emissions (tons/year)
Scarfing	0.30	200	262.80	95.00%	13.140

Methodology :

Emission factor provided by source based on scarfing operations conducted at other locations.

Note that this emission factor is three times the emissions factor provided in AP-42.

Uncontrolled Emissions (tons/yr) = Maximum Material Throughput (tons/yr) * Emission Factor (lbs/ton) * 1 ton/2000lbs.

Controlled Emissions (tons/yr) = Maximum Material Throughput (tons/yr) * Emission Factor (lbs/ton) * Collection Efficiency (%) * 1 ton/2000 lbs.

Appendix A: Emissions Calculations
Emissions from Natural Gas Burned in Scarfing Process

Company Name: Indiana Flame Service (a contractor for Bethlehem Steel)
Address City IN Zip: U.S. Highway 12, Burns Harbor, IN
CP: 127-14517
Plt ID: 127-00026
Reviewer: ERG/AB
Date: 07/17/01

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

1.6

13.6

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.052	0.052	0.004	0.679	0.037	0.570

*PM and PM-10 emission factors include filterable and condensable.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Emissions from Natural Gas Burned in Scarfing Process
MM BTU/HR <100
HAPs Emissions

Page 3 of 3 TSD App A

Company Name: Indiana Flame Service (a contractor for Bethlehem Steel)
Address City IN Zip: U.S. Highway 12, Burns Harbor, IN
CP: 127-14517
Plt ID: 127-00026
Reviewer: ERG/AB
Date: 07/17/01

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.426E-05	8.147E-06	5.092E-04	1.222E-02	2.308E-05

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	3.395E-06	7.468E-06	9.505E-06	2.580E-06	1.426E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.